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# QUARTERLY ACTIVITIES REPORT

25 January 2022

For the period ended 31 December 2021

# HIGHLIGHTS – Kambalda Nickel Project

- East Cooee Hanging-wall infill RC drilling completed at better than 40m x 40m spacing prospect renamed "**Baker**" ahead of first Mineral Resource estimate.
- Significant intersections of visual sulphides confirmed as nickel bearing both in this RC infill and diamond drilling at Baker and Warren.
- Assay results returned from RC drilling of targets at Warren, Somerset and East Cooee. Significant results recorded at **Warren** were:
  - 4m @ 3.44% Ni from 163m (WRN21RC\_007 channel position, thicker, better grade than expected);
  - o 5m @ 0.78% Ni from 175m (WRN21RC\_005 test of flank position).
- At the Baker prospect multiple hits prior to the RC infill including:
  - $\circ~$  9m @ 1.66% Ni from 113 metres and post quarter's end early returns from the infill drilling:
  - 7m @ 9.22% Ni from 123m downhole (ECO21RC\_040); including; 6m @ 10.5% Ni from 124.0m;
  - 8m @ 2.52% Ni from 97m downhole (ECO21RC\_022); including; 3m @ 4.74% Ni from 102.0m;
  - 6m @ 3.67% Ni from 132m downhole (ECO21RC\_024); including; 4m @ 4.86% Ni from 133.0m;
  - 10m @ 6.82% Ni from 160m downhole (ECO21RC\_042);
  - $\circ~$  3m @ 7.88% Ni from 180m downhole (ECO21RC\_030);
  - $\circ~$  2m @ 4.27% Ni from 187m downhole (ECO21RC\_029); and
  - 2.7m @ 10.72% Ni from 167.85m downhole (ECO21DD\_004);
- Diamond drilling continued throughout the quarter testing nickel potential, primarily at Warren but also completing the first three holes at Baker and "sighter" holes for upcoming WA government EIS Grant deep diamond programme at Kenilworth.

### CORPORATE

- 31 December 2021 cash balance of \$9.2 million. Planned activity for March 2022 quarter is as follows:
  - o Complete initial Mineral Resource estimate at:
    - Baker, upon receipt of all assays and completion of geological interpretation
    - N75C, part of the Historical Drill Core Programme at Foster Mine
  - Ongoing reporting of nickel and gold assay results from 2021 RC and diamond drill programmes, still outstanding due to slow laboratory turnaround times;



- Baker to receive further RC drilling targeting thick, higher grade trends identified by the infill drilling that remain open and further diamond drilling for metallurgical characterisation and geotechnical/structural logging;
- Accelerate permitting process for dewatering of Foster Mine whilst scoping out process for possible future Baker access.

Managing Director Ed Ainscough said: *"It has been an extremely busy quarter with excellent progress by the site team on all key targets. Delivering high grade nickel results at East Cooee is a highlight and the area offers immediate opportunities to grow our Mineral Resource quickly with the discovery of Baker. The rigs will be back there this quarter and the goal is to report an initial maiden resource as soon as possible whilst making sure we keep our eye firmly focussed on the potential for a bigger opportunity."* 

Lunnon Metals Limited (ASX: LM8) (the "Company" or "Lunnon Metals") is pleased to report on activities during the December 2021 quarter.

### KAMBALDA NICKEL PROJECT ("KNP")

#### Safety & Environment

The Company has complied with the Western Australian government's "Mandatory COVID-19 vaccinations" policy. Whilst select personnel chose not to receive the vaccine and thus ceased employment, there has been no material impact on activities at the project to date.

One safety incident occurred during the quarter. The geophysical survey crew experienced a break in the surface EM loop wire, causing a minor fire, which was quickly extinguished.

#### Drilling Programme Physicals

A total of approximately 10,000m was drilled during the quarter comprising approximately 6,750m of Reverse Circulation ("**RC**") and 3,240m of diamond drilling ("**DD**"). Post quarter end, assay results representing approximately 3,700m of the total drilled to date remained pending. In total, the Company has now completed approximately 19,000m of drilling compared to its Initial Public Offering ("**IPO**") 2 year programme of 28,000m.



Figure 1: Plan of the Kambalda Nickel Project showing location of all work areas, highlighting the location of Warren and N75C long projections (see Figures 9 & 13).



#### KNP DISCOVERY PROGRAMME UPDATE

#### Baker Shoot

Baker (formerly ECO-H/W) is located in the East Cooee area, host to a considerable quantity of hanging-wall nickel mineralisation and anomalism as well as high grade sulphide mineralisation on the komatiite-basalt contact. Only sporadic drilling by WMC Resources Ltd ("**WMC**") occurred in the past which did not adequately test the various prospects. This area was a high ranking target within the Company's portfolio and selected to be the first target to receive RC drilling post the IPO.

The Company made significant progress at Baker during the quarter completing the RC infill programme to a spacing of better than 40m x 40m. Diamond drilling was also conducted immediately prior to Christmas with three holes targeting an approximately 6m wide, massive nickel sulphide intersection reported in EC021RC\_042 (see announcement dated 3 December 2021) and other mineralised zones where the RC infill drilling had indicated the development of massive sulphides.

A portable XRF unit was used at site to focus sample dispatch on the higher grade nickel mineralised zones in the RC programme, the goal being to speed up the turnaround time awaiting assays. The XRF unit also allowed the Company to drill additional RC holes whilst the programme was on foot and optimise the placement of the three diamond holes.

As reported on 16 December 2021, the 30 hole RC programme was completed and the first diamond hole, ECO21DD\_004, intersected 1.9m of massive (>95% sulphide in rock) nickel sulphides in core (see Figure 2 below).

Initial observations indicated that the massive nickel sulphides intersected in ECO21DD\_004 were likely related to a structure represented by a large Down Hole Transient Electro-Magnetic ("**DHTEM**") conductive plate that is at an angle to the stratigraphy (reported on 19 October 2021). It also appeared that the high grade nickel mineralisation associated with this plate remains open along strike.

The thicker mineralisation reported on 3 December 2021 from RC hole ECO21RC\_042, may also represent the junction between the gently dipping and laterally persistent hanging-wall mineralisation and a mineralised structure, coincident with the DHTEM plate, which may have remobilised the nickel sulphides along the resultant intersection "hinge line".





Figure 2: Core from ECO21DD\_004 - massive nickel sulphide zone from 167.85m downhole

The Baker Shoot's discovery represents an exciting opportunity for the following reasons:

- 1. The target mineralised zone is at shallow depths (100m-165m below surface);
- 2. It is close (350m-400m) to an existing open pit which provides potential portal access;
- 3. The immediate hanging-wall komatiite rock has been recorded to date as a competent unit; and
- 4. Early indications are that the key metallurgical characteristics, Fe, MgO and S, are all positive with no indications of any deleterious elements at levels that may pose future issues for processing.

Subsequent to quarter end, the Company updated the market that the smaller sample batch sizes, able to be identified with use of the XRF unit, had yielded substantially faster assay turnaround times than previously experienced.

Assay results for two complete lines of holes drilled in November and December 2021 delivered the following significant results (above 1% Ni cut-off grade):



#### Section 6,531,160mN (see Figure 3):

- 10m @ 6.82% Ni from 160m downhole (ECO21RC\_042);
- 3m @ 7.88% Ni from 180m downhole (ECO21RC\_030);
- 2m @ 4.27% Ni from 187m downhole (ECO21RC\_029);
- 2.7m @ 10.72% Ni from 167.85m downhole (ECO21DD\_004).

#### Section 6,531,200mN (see Figure 4):

- 7m @ 9.22% Ni from 123m downhole (ECO21RC\_040) including; 6m @ 10.5% Ni from 124m;
- 8m @ 2.52% Ni from 97m downhole (ECO21RC\_022) including; 3m @ 4.74% Ni from 102m;
- 6m @ 3.67% Ni from 132m downhole (ECO21RC\_024) including; 4m @ 4.86% Ni from 133m.

Logging of diamond drill core indicates that these structures may thicken the mineralised zone, imparting a "pinching and swelling" character (see Figures 3 & 4). Structures may also have concentrated nickel in proximity to the blanket of laterally extensive mineralisation that formed the original "hanging-wall" target horizon at Baker. Final results and interpretation of all the diamond holes will assist the Company to determine the extent of the very highest, thickest grade mineralisation.



Figure 3: Cross section (6,531,160mN) through Baker RC infill drilling, including previous drilling (looking north: Grid:MGA94\_51)





*Figure 4:* Cross section (6,531,200mN) through first line of Baker RC infill drilling, including previous drilling (looking north: Grid:MGA94\_51)

In the post quarter end announcements (dated 17 & 20 January 2022), the Company highlighted that the emergence of this apparent very high grade and frequently thickened nickel mineralised zone, as recorded in holes ECO21RC\_040 and 042, will require follow up RC and select diamond drilling to ensure its impact is fully captured in the coming maiden Mineral Resource.

Geological modelling for this Mineral Resource estimation is underway. Additional diamond core will also be necessary for detailed geotechnical and metallurgical characterisation of this important high grade zone.

The Company will also seek to increase the resources allocated to Baker reflecting its high priority status, including recruitment of dedicated project personnel who will advance planning and permitting goals.

Baker, together with all Lunnon Metals' key projects and the 39,000t of nickel metal already in Mineral Resource, is hosted on granted Mining leases with significant critical infrastructure in place and only 25km by road to BHP Nickel West's Kambalda Concentrator.

The **East Trough prospect** is located approximately 300m to 400m to the south-west of Baker. As reported previously<sup>1</sup>, Lunnon Metals intersected **2m @ 5.07% Ni** in ECO21RC\_005 on an interpreted embayment in the East Trough. The initial DHTEM survey in October 2021 failed to reach target depth and so a deeper diamond drill hole (ECO21DD\_001) was drilled and surveyed in the footwall of the interpreted trough, attempting to detect the presence of nickel sulphides to the west (footwall) of the intercept in ECO21RC\_005. Results were reported when received along with analysis by the company's geophysical consultants.

<sup>&</sup>lt;sup>1</sup> See ASX announcements dated 28<sup>th</sup> September, 1<sup>st</sup> October & 19<sup>th</sup> October 2021 for previous activity/drilling results referenced



Four conductive plates were modelled (see Figure 5 below).

• Two modest sized conductive plates (**A & B**) modelled in the immediate vicinity of the nickel intersected in ECO21RC\_005 are aligned along the interpreted trough and believed to represent pods of massive nickel sulphides between RC holes ECO21RC\_005 and ECO21RC\_003.



Figure 5: Representation of DHTEM plates surrounding 2m @ 5.07% Ni in ECO21RC\_005 – see ASX announcements dated 27 July and 28 September 2021 for additional details of holes annotated.

- A larger conductive plate (**C**) was modelled to the east and is interpreted to represent nickel mineralisation that was recorded higher up in the same ECO21RC\_005 hole (1m @ 1.11% Ni). This plate extends to the east at least 50m at a gentle dip and extends 225m up and down plunge.
- The largest plate (**D**), furthest to the east, is interpreted to represent a transition from possible nickel mineralisation to sediment on the komatiite-basalt contact and is not considered prospective for nickel mineralisation at this time.

The deeper, down plunge potential on East Trough remains open and will be tested in due course with diamond drill holes followed by DHTEM surveys, taking a staged approach to the exploration effort at depth. As the Baker discovery has shown, gaps in the previous WMC drilling present significant opportunities and as Figure 6 below illustrates, over 675m of plunge extent exists along East Trough with encouraging historical intercepts in the limited drilling that is present.



Any nickel mineralisation discovered on East Trough will, when coupled with the exciting emergence of Baker Shoot, add to the potential for the East Cooee area to be an important second centre of mineral resource growth at the KNP.



*Figure 6:* East Trough – Long Projection of current Lunnon Metals' and WMC's historical drill pierce points, width and grade (above 0.5% and 1.0% cut off – where applicable)

#### • Warren

**Up Plunge -** The initial Mineral Resource at Warren stands at 211,000 tonnes at 3.1% Ni for 6,400 tonnes of nickel metal. The exploration programme at Warren was designed to test the channel and surrounding area for nickel sulphides, both up and down plunge of the historical workings and demonstrate that Warren mirrors the main Foster channel, in length and prospectivity. Results for the 7 RC holes drilled during the quarter above the limited historical workings returned the following significant results.

- 4m @ 3.44% Ni from 163m (WRN21RC\_007 channel position);
- 5m @ 0.78% Ni from 175m (WRN21RC\_005 channel flank);
- 4m @ 1.58% Ni from 58m (WRN21RC\_004 oxide);
- 4m @ 1.15% Ni from 42m (WRN21RC\_001 oxide).

As reported on 19 November 2021, the Company planned follow up drilling with respect to the down plunge potential along interpreted steeper trends which are considered open. By quarter end six RC follow up holes had been completed with full assay results pending.





Figure 7: Longitudinal Projection of the upper Warren Channel highlighting location of RC drill results and historical WMC holes

**Down-Plunge** - in light of the delay experienced during the quarter with receiving assay results, the Company decided to bring forward deeper diamond drill testing of the Warren channel, well below the historical workings and in gaps between both previous WMC drilling and its own Mineral Resource boundaries. The objective of this programme is to demonstrate that the potential on the Warren channel can mirror the Foster channel. Early results from the programme are extremely encouraging and the Company will continue to pursue deeper, aggressive steps out, as and when warranted by the results returned.

Diamond drill hole WRN21DD\_001 hit vein/blebby, stringer and brecciated nickel sulphides towards the base of the komatiite and in the footwall basalt (see Figure 9 for location of pierce point). Analysis of these 10-20cm zones by the XRF unit confirmed the presence of nickel and the hole has been logged, sampled and sent for assay (results still pending). The Company believes it has hit the prospective nickel contact on the upper edge of the Warren channel. By quarter end a "daughter" wedge hole had just been completed to test a large conductive plate that had been generated during the DHTEM survey of the parent.

The DHTEM plate's size was bigger than expected and likely represents a flanking sulphide rich sediment, still considered worthy of investigation. Subsequent initial logging of the "daughter" wedge diamond hole indicated an approximate 4m wide, pyrrhotite dominant sediment. However, noteworthy were the minor disseminated to blebby nickel sulphides in the hanging-wall of the sediment (hosted in Kambalda Komatiite) and remobilised pentlandite in the footwall basalt. This hole is interpreted to have hit below the main channel and thus constrains the channel dimensions for testing by the next daughter wedge hole, which will be planned to hit the contact mid-channel.

Drilling of the second parent diamond hole at Warren, WRN21DD\_003, successfully intersected 2.33m of massive to semi-massive/matrix nickel sulphides on the contact between the Kambalda Komatiite and the



Lunnon Basalt. This diamond hole intersection was outside the current Mineral Resource boundaries. A further 6.12m of disseminated nickel sulphides were intersected above the massive to semi-massive/matrix component. These intersections commenced at a downhole depth of 353.05m.



*Figure 8: Photo-mosaic core from WRN21DD\_003 – downhole depths updated with nickel grades, core widths 50mm for scale* 

Subsequent to quarter end, the Company received assay results for WRN21DD\_003 as follows:

- 8.72m @ 3.54% Ni (from 353.05m) downhole including;
- 2.33m @ 4.41% Ni (from 359.44m) for the interval previously reported as 40-80% sulphide in rock, matrix to semi-massive nickel sulphides; and
- Internal waste (intermediate intrusion) of 0.27m from 359.17m; and
- 6.12m @ 3.37% Ni for the mineralised nickel sulphide zone above the intrusion.

A further 0.73m @ 1.02% Ni (from 361.77m downhole) and 0.43m @ 3.07% Ni (from 367.72m downhole) were recorded in the Lunnon Basalt below (in the footwall of) the above intercepts. True widths are estimated to be approximately 90% of the drilled length. The Company also notes that elevated platinum and palladium assays were recorded for the same 8.72m intersection, 0.64g/t Pt and 1.43g/t Pd respectively.





*Figure 9: Long Projection of the Warren shoot/channel showing plate location & pierce point for WRN21DD\_003 reported intersection* 

#### **INTERPRETATION OF WARREN RESULT & DHTEM**

The following key observations have been made by the site geology team:

- 1. WRN21DD\_003 intersected the nickel mineralisation and prospective contact below (deeper) than the modelled position based on the nearest historical WMC diamond holes;
- 2. DHTEM survey results have been returned from surveying of WRN21DD\_003. A high conductance, late time response was modelled surrounding this diamond hole at the depth of the intersected sulphides, suggestive of the extent of the nickel mineralisation intersected in WRN21DD\_003; and
- 3. Previous WMC documentation had referred to this area as a barren flanking zone between more deeply incised nickel pods that WMC's drilling intersected either side. That theory has now been disproved by the Lunnon Metals' diamond drill hole and the DHTEM survey results, opening up the potential for this mineralisation to be an entirely new pod of nickel mineralisation or potentially link with the Mineral Resource already defined up and down plunge.

The plate has dimensions of 40m x 55m and will now be targeted by a "daughter" hole to be wedged off the parent. Daughter hole drilling will also continue targeting potential nickel mineralisation around and between WRN21DD\_001 and its daughter.



#### • Jan (Near Surface)

Eight RC drillholes were completed during a hiatus in the main Warren and Baker RC programmes. These holes were designed to test lower priority, near surface targets on both the prospective nickel contact and mineralised positions in hanging-wall komatiite. Subsequent to quarter end, the Company received assay results as follows:

- Holes JAN21RC\_001, 002 and 005 returned no significant assays
- JAN21RC\_003: 11m @ 0.73% Ni (18m);
- JAN21RC\_004: 5m @ 0.97% Ni (39m);
- JAN21RC\_006: 6m @ 0.63% Ni (27m), 6m @ 1.02% Ni (37m) and 3m @ 0.58% Ni (45m);
- JAN21RC\_007: 11m @ 0.61% Ni (52m);
- JAN21RC\_008: 4m @ 1.35% Ni (42m).

In light of the priority now being given to the Baker, Warren and Foster mine area programmes, these near surface Jan targets will be re-ranked and reassessed. Deeper diamond drilling on the main Jan nickel shoots is planned for the first half of 2022.

#### Somerset (Cooee Gap)

Four RC holes, COE21RC\_001 through to 004, drilled beneath the Somerset/Cooee Gap broad nickel soil anomaly, intersected the komatiite-basalt contact without recording any significant nickel mineralisation or structural complexity. As such, the anomaly, which is the strongest and highest magnitude nickel-in-soils geochemical anomalism within the KNP, remains unexplained.

We note that these initial four holes were between 140m and 180m apart, aligned parallel to the prospective contact and targeted hitting this contact approximately 70m to 100m below surface where thrust repeats of the contact may have occurred.

The Company takes great confidence from its initial success at both Baker and Warren, which has been achieved within and between historical WMC drilling on similar spacing. The target will be reassessed to determine further work programmes aimed at explaining the soil anomaly.

#### • Lunnon Basalt Footwall (Gold)

Three RC holes were also drilled during a hiatus in the main Warren and Baker RC programmes. The target in this case was a conceptual gold target in the footwall of the prospective nickel contact hosted within the Lunnon Basalt in the Cooee Gap area.

Highly encouraging zones of quartz carbonate veining with associated albite+biotite+sulphide alteration in structurally deformed Lunnon Basalt and Lunnon Sediment were intersected in both RC holes LBS21RC\_013 and LBS21RC\_014. Subsequent to quarter end, the Company reported the assay results with LBS21RC\_013, returning the following three intercepts:

• 1m @ 0.79g/t Au (55m), 2m @ 0.70g/t (82m) and 1m @ 1.09g/t (93m).

The other two holes returned no significant assays.



All seven holes drilled at Somerset and Lunnon Basalt Footwall were extended in depth to ensure that they intersected the "Lunnon Sediment" horizon, a 3m to 5m wide, interflow sediment within the Lunnon Basalt, located approximately 110m below the prospective nickel contact. This Lunnon Sediment is a cherty, sulphidic rock unit and is host to the extremely high grade gold occurrences at the Beta/Hunt Mine, some 15km north

of the KNP, owned and operated by Karora Resources (for example Karora Resources' Father's Day Vein discovery).

Locating and characterising this important regional marker horizon and potential gold host will enable future targeting of zones where this sediment intersects gold hosting fault structures, mapped and recorded at surface.



Figure 10 below shows the collar locations of the three programmes reported above.

Figure 10: Plan view showing simplified key geology and location of drill collars of lower priority programmes

#### • Foster "Gap" – nickel / gold

**Nickel** - Post quarter end assay results were reported in respect to the nickel mineralisation at the prospective komatiite-basalt contact intersected in the Foster Gap target. Diamond hole FOS21DD\_001, originally reported on 5th October 2021, finally returned assay results associated with minor sulphide mineralisation recorded during logging immediately above the contact:

• 1.0m @ 0.65% Ni (from 551.0m) towards the base of the Kambalda Komatiite.

The Company is encouraged by this result as it highlights that the base of the komatiite is still fertile and thus prospective in the immediate vicinity of known nickel mineralisation between the southern end of the historical Foster workings and the Company's existing 16,000 tonnes of nickel metal at Foster South (JORC 2012 Mineral Resource).



**Gold** - The presence of free gold in one of the original core samples submitted from FOS21DD\_001, which returned an assay that was not reflective of that fact, raised the potential that there may be a fine gold component in the intersection. Screen fire assays were completed for the entire intersection and post the end of the quarter, were reported as recording similar results (1.46g/t Au) as the original 7.84m (7.0 mTW) @ 1.50g/t Au from 166m.

Assay results are still pending for the additional holes that were drilled to evaluate whether the structure was continuous, namely FOS21DD\_002 and diamond extensions of CD 16003 (originally drilled by Gold Fields Ltd in 2011) and CD 3300 (drilled by WMC 1991).

Further gold intercepts of note were returned in FOS21DD\_001 as follows:

- 0.2m @ 26.87g/t Au (from 127.8m);
- 1.5m @ 2.80g/t Au (from 797.0m); and
- 0.9m @ 1.31g/t Au (from 809.0m).

These gold intercepts, logged as zones of narrow extensional quartz veining, highlight the inherent prospectivity for gold of the host rocks at the KNP and assist the Company in defining and mapping potential gold hosting structures for future targeting both from surface and, in the future, underground drilling.

The long projection in Figure 11 below illustrates the pierce points of the reported screen fire assay gold result and the nickel mineralisation reported in FOS21DD\_001 at the komatiite-basalt contact.



Figure 11: Longitudinal Projection of Foster Mine (looking north-east) illustrating the intersection points of reported Foster Gap diamond drill holes, related to both gold and the prospective nickel contact.



#### • WA Government - EIS Grant – Kenilworth Target

Three diamond drill holes were completed as "sighter" holes to assist final drill hole planning for the collar location of the WA Government Exploration Incentive Scheme ("**EIS**") hole. This deep diamond drill hole will be designed to test the conceptual Kenilworth prospect, both a nickel and gold exploration target focused on a significant, and unexplained, magnetic anomaly, see Figure 12 below.

Assay results are pending for all holes however the geology and structure recorded indicates significant shearing and deformation of the targeted host rocks, a good sign for potential gold mineralisation.

The EIS hole is planned to be approximately 1,450m deep and must be completed, logged and assayed prior to 30 June 2022 under the terms of the WA government EIS grant.



Figure 12: Aeromagnetic image of the Kambalda Nickel Project with the Kenilworth target, a "mag' high", circled white

#### HISTORICAL DRILL CORE PROGRAMME ("HDCP")

The HDCP is an active programme to report Mineral Resources under the JORC 2012 Code at the Foster Nickel Mine from the historical nickel mineralisation remaining when the mine closed in 1994. The historical WMC drill core (up to 50 years old) was acquired as part of the KNP. The re-assaying programme contributes to Mineral Resource estimation for areas left unmined at the time of mine closure, as well as highlighting areas for future exploration drilling. The goal is to provide regular updates and additions to the Company's Mineral Resource in parallel to any growth derived from the ongoing RC and DD discovery effort.

#### • N75C

A high priority target selected for the HDCP programme was the N75C surface due to:

- 1. Historical records indicating the presence of a so-called "thick" mineralised trend on the WMC long projection when the mine closed (1994); and
- 2. Its proximity to the Company's existing Mineral Resource at the 85H surface, which is only 230m away to the immediate south, with the N75C located along the access route to the 85H area.



A review of the N75C historical data highlighted areas apparently unmined by WMC when Foster closed in 1994, including documented thick nickel mineralised trends. In particular, Lunnon Metals noted hole CD 54 recorded:

#### • 16.52m (11.2 mTW) @ 3.05% Ni from 268.22m down hole.

CD 54, together with a representative range of other holes from the N75C, were retrieved from the St Ives-Kambalda Core Yard, inspected and re-assayed where sufficient core was available. This core ranged from 33 to 47 years in age. A single interval could not be re-assayed in CD 54, however the remaining 15.75m assayed as follows:

• 15.75m (10.7mTW) @ 2.76% Ni (vs WMC's 3.06% Ni composited for the same individual intercepts)

In total, over 80 samples were re-assayed from nine diamond holes. This exercise showed an extremely close correlation (97.6%) between the Company's new results and the original WMC assays.

As part of its exploration strategy, Lunnon Metals drilled approximately 20 metres to the south of CD 54, in the middle of an apparent unmined block to confirm that this part of the mineralised N75C surface was actually still there (unmined). FOS21DD\_003 hit the interpreted N75C surface confirming the area is unmined and intersected 7.7m of disseminated nickel sulphides. Post quarter end assays were received, recording the following significant intersection:

#### • 7.7m @ 2.92% Ni from 315.20m downhole.

Work towards an initial Mineral Resource for N75C is ongoing and will be reported in the March 2022 quarter as soon as it is complete.



Figure 13 : Representation of WMC Longitudinal Projection for the N75C & N72C nickel surfaces at the Foster Mine, KNP (looking north east) – see ASX announcement dated 26th November 2021 for details of numbered WMC drill holes.



## SITE LOGISTICS

#### Drilling Programme

Significant delays experienced in regard to assay turnaround times for most of the quarter now appear to be resolving themselves, however, there are still assay results pending from drilling undertaken as far back as the September quarter.

In response to the slow turnaround during the September and December quarters, the Company bought a portable XRF hand-held device to enable it to scan both core and RC chips for the presence of nickel mineralisation and associated elements. Whilst the results produced by the device are not qualitative, they do allow Lunnon Metals field personnel to optimise drill programmes whilst on foot and focus sample dispatch on the higher-grade nickel mineralised zones, thereby seeking to improve assay turnaround times due to smaller batch sizes. This tactic proved successful and assay results for the more recent programmes are now being received before programmes drilled much earlier in 2021.

DD drilling continued throughout the period. RC drilling was completed in a series of staged programmes with lower priority targets used as a means to maintain RC rig availability at the KNP for the higher priority infill drilling, particularly at Baker.

#### Permitting/Regulatory Framework

Work continues in relation to the permitting and approvals required to enable the future dewatering of the Foster Mine workings and then subsequent digging out of the portal and re-entry to the decline. The primary purpose is to enable the Company to safely re-enter the mine workings in the future and establish underground drill platforms to explore the main Foster nickel channel from close proximity.

Due to the success of the Baker infill drilling, discussions were also commenced with Gold Fields St lves representatives both in relation to the above approvals for Foster dewatering but also to discuss possible activities required to consider accessing any future Baker Mineral Resource from the nearby West Idough gold open pit, located just 350m to 400m to the immediate north of the Baker nickel mineralisation identified to date.

The pit reaches a depth of at least 65m and exposes fresh rock at its base. The pit would serve as an excellent portal site for any future underground access, minimising both the cost of establishing operations in that part of the KNP and also, importantly, disturbance to the environment.

#### CORPORATE

#### **ASX lodgements**

During the quarter, the Company maintained an active news flow and lodged the following announcements on the ASX.

- 21 Dec 2021 Notification regarding unquoted securities LM8
- 20 Dec 2021 Change of Registry Address
- 17 Dec 2021 Release of Shares from Escrow
- 16 Dec 2021 First Diamond Hole Confirms Massive Nickel Sulphides
- 06 Dec 2021 Investor Update Presentation
- 06 Dec 2021 Logging Confirms Disseminated Nickel Sulphides at Foster
- 03 Dec 2021 East Cooee Drilling Hits Massive Nickel Sulphides Over 6m
- 02 Dec 2021 Nickel Sulphides Keep Coming at Warren
- 26 Nov 2021 Re-assays Record Excellent Results for N75C
- 19 Nov 2021 RC Drilling Hits High Grade Nickel at Warren
- 16 Nov 2021 Results of Annual General Meeting



- 16 Nov 2021 Chairman's Address and MD Presentation 2021 AGM
- 12 Nov 2021 East Cooee Exploration Update (Amended)
- 12 Nov 2021 East Cooee Exploration Update
- 27 Oct 2021 Notification regarding unquoted securities LM8
- 26 Oct 2021 Quarterly Cashflow Report September 2021
- 26 Oct 2021 Quarterly Activities Report September 2021
- 19 Oct 2021 More Nickel at East Cooee Hanging-Wall
- 13 Oct 2021 Notice of Annual General Meeting/Proxy Form
- 05 Oct 2021 Australian Nickel Conference Presentation
- 05 Oct 2021 Diamond Drilling Hits Gold Structure at Foster
- 01 Oct 2021 East Cooee Records More High Grade Nickel

Subsequent to the quarter's end, and up to the date of this Quarterly Report, the Company lodged the following announcements on the ASX.

- 20 Jan 2022 Baker 2.7m @ 10.72% Ni and 10m @ 6.82% Ni
- 17 Jan 2022 Baker Delights 7m @ 9.22% Nickel (with two associated trading halt notices on 13 Jan 2022)
- 06 Jan 2022 Foster Mine Update N75C Delivers 7.7m @ 2.92% Nickel
- 04 Jan 2022 KNP Programme Update, Warren Returns 8.72m @ 3.54% Nickel

#### Annual General Meeting

The Company held its Annual General Meeting on 16 November 2021. All resolutions tabled were passed.

#### **Cash Position**

As at 31 December 2021, Lunnon Metals held approximately \$9.2 million (30 September 2021: \$11.8 million) in cash.

Full details regarding the Company's cash movements during the quarter can be found in the Appendix 5B accompanying this report.

For further information regarding the Company's activities please visit the website www.lunnonmetals.com.au or contact the Company, details below.

Approved and authorised for release by the Board.

Edmund Ainscough Managing Director Phone: +61 8 9226 0887 Email: info@lunnonmetals.com.au



#### **COMPETENT PERSON'S STATEMENT**

The information in this announcement that relates to geology, nickel Mineral Resources, Exploration Results and the East Cooee Exploration Target is based on, and fairly represents, information and supporting documentation prepared by Mr. Aaron Wehrle, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Wehrle is a full time employee of Lunnon Metals Ltd, a shareholder and holder of employee options; he has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Wehrle consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

#### DISCLAIMER

References in this announcement may have been made to certain ASX announcements, which in turn may have included exploration results and Mineral Resources. For full details, please refer to the said announcement on the said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and mentioned announcements, the Company confirms it is not aware of any new information or data that materially affects the original market announcement(s), and in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.



#### **APPENDIX 1 – ADDITIONAL ASX LISTING RULE DISCLOSURES**

#### Compliance

For the purpose of ASX Listing Rule 5.3.1, payments for exploration, evaluation and development during the quarter totalled \$2.2 million, as detailed in the Company's accompanying Appendix 5B statement (exclusive of KNP exploration salaries). This figure includes an amount of \$0.604 million for exploration that was capitalised (principally drilling at Warren) and \$0.10 million for property, plant and equipment purchased directly in support of the site based exploration programme. Details of exploration activities undertaken during the quarter are as described in the preceding quarterly report and this Appendix.

For the purpose of ASX Listing Rule 5.3.2, the Company confirms there were no substantive mining production and development activities undertaken during the quarter.

Pursuant to ASX Listing Rule 5.3.3, the details of the mining tenements and the Company's beneficial percentage interest held in those Tenements at the end of the quarter is included in the Table at the end of this Appendix and their location shown diagrammatically in Figure 14 below.

Pursuant to ASX Listing Rule 5.3.4, the Company provides its actual expenditure grouped and categorised against the items presented in the two year "Use of Funds" statement in its IPO Prospectus. This table covers the period from the date of its admission to ASX Official List (being 16 June 2021) up to 31 December 2021 and presents the actual expense against the estimated 2 year expenditure on those item groupings. An explanation of any material differences follows the table.

Use of Funds	Prospectus estimate (2 years)	Actual use (16 June 2021 - Dec 2021 quarter end)	Variance
	\$ millions	\$ millions	\$ millions
Exploration at the Kambalda Nickel Project - nickel	8.8	3.18	-5.62
Exploration at the Kambalda Nickel Project - gold	0.9	0.18	-0.72
Re-establish surface infrastructure, cost/initiate dewatering	1.4	0.19	-1.21
Corporate, administration and working capital	2.83	1.10	-1.73
Expenses of the Offer	1.07	1.10	+0.03
Total^	15.0	5.75	-9.25

Table 1: Use of Funds comparison - IPO 16 June 2021 to 31 December 2021

*^totals may not add up due to rounding.* 



The Company continues to reconcile well against the expense categories reported in the "Use of Funds" statement.

In relation to the main expense component, Exploration, both for nickel and gold at the KNP, close to 19,000m of drilling have now been completed as compared to the 2 year forecast of approximately 28,000m at the time of IPO i.e. just over 68% of the originally envisaged drilling is now complete. This significant over performance is due to the discovery of the Baker Shoot and the relative ease of drilling it with RC techniques due to its shallow depth, allowing the Company to aggressively advance its knowledge of this potential new source of nickel mineralisation.

Drilling activities commenced in late July 2021 and were suspended for the 2021 Christmas/New Year period, representing close to 5 full months of on-ground activity. The overall expense in relation to the exploration and site based programme since the Company's IPO is \$3.56 million versus a total of \$11.1 million for the full 2 years. This rate of expenditure reconciles well with the Company's expected scheduled activities over the first 18 months post IPO.

As in previous quarters, the timing of the receipt of drilling and site support expense based invoices for services already provided in the month subsequent to the completion of the relevant works, may also contribute to any variance at the end of any particular individual reporting quarter.

There is no change in relation to the reconciliation of the Expenses of the Offer estimated at \$1.07 million from last quarter's report.

The Company remains on schedule to meet the expenditure targets and the business objectives underpinning the Use of Funds table in the Prospectus over the duration of the 2 year forecast period.

For the purpose of ASX Listing Rule 5.3.5, payments to related parties or associates of Lunnon Metals during the quarter totalled \$154,000. The payments were in respect of salaries, fees and superannuation to directors and a senior executive and office rental payments to Junk Super Pty Ltd, a related entity of non-executive director lan Junk.



# **Tenement Summary** (All tenements are in location about 20 km south from Kambalda – see Figure 14 below table)

Tenement	Location	Nature of Interest*	Interest at beginning of quarter	Interest at end of quarter
M15/1546	Kambalda district,	Granted, all mineral rights excepting rights to gold in	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	the "Excluded Areas"		
M15/1548	Kambalda district,	Granted, all mineral rights excepting rights to gold in	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	the "Excluded Areas"		
M15/1549	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		
M15/1550	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		
M15/1551	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd	_	_
M15/1553	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		_
M15/1556	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		-
M15/1557	Kambalda district,	Granted, all mineral rights excepting rights to gold in	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	the "Excluded Areas"		
M15/1559	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd	_	_
M15/1568	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		_
M15/1570	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		_
M15/1571	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd	_	_
M15/1572	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		_
M15/1573	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		
M15/1575	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd	_	_
M15/1576	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd	_	_



Tenement	Location	Nature of Interest*	Interest at beginning of quarter	Interest at end of quarter
M15/1577	Kambalda district,	Granted, all mineral rights excepting select rights to	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	gold held by St Ives Gold Mining Co. Pty Ltd		
M15/1590	Kambalda district,	Granted, all mineral rights excepting rights to gold in	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	the "Excluded Areas"		
M15/1592	Kambalda district,	Granted, all mineral rights excepting rights to gold in	100% legal & beneficial interest	100% legal & beneficial interest
	Western Australia	the "Excluded Areas"		

\*St lves retains rights to explore for and mine gold in the "Excluded Areas" on the Tenements as defined in the subsisting agreements between Lunnon Metals and St lves. This right extends to gold mineralisation which extends from the Excluded Area to other parts of the Tenements with select restrictions which serve to prevent interference with, or intrusion on, Lunnon Metals' existing or planned activities and those parts of the Tenements containing the historical nickel mines. St lves enjoys select rights to gold in the remaining areas of the Tenements in certain limited circumstances as described in detail in the Company's Solicitor Report attached to the Prospectus submitted to the ASX dated 22 April 2021 and lodged with the ASX on 11 June 2021.





Figure 14: Tenement Map as released in the Solicitor's Report appended to the Company's Prospectus dated 22 April 2021 and announced to the ASX on 11 June 2021 – illustrating tenement IDs with historical mines and surface interpretative geology shown.